

INTERFACE STANDARDS

Department of Transportation

DELPHI Program



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## Introduction

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### Purpose

The purpose of this document is to introduce standards that will be used during the design, development and execution of inbound and outbound interfaces within the DELPHI system.

Interface programs are developed to translate data from one application system to another. Inbound interface programs are developed to translate and reformat data to meet the criteria and needs of the DELPHI system. Outbound interface programs translate and reformat the data to meet the criteria of an external system (e.g., Treasury's Electronic Certification System).

These Interface Standards will evolve over the life of the DELPHI Program. Periodic revisions to this document will occur. This document will be redistributed when revisions occur.

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### Scope

This document defines the interface standards for the DELPHI Program in the following areas:

- Use of Oracle Open Interfaces
- Interface Environment Standards
- Naming Standards for the Interface data files
- Interface Feeder Program Requirements
- Interface Testing Standards
- Delivery and Acceptance Standards

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### Related Documents

1. Interface Strategy for the DELPHI Program
2. Oracle Open Interfaces Manual

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## Use of Oracle Open Interfaces

The DELPHI Program uses the existing Oracle Open interfaces provided in the baseline Oracle applications. Oracle Financials open interfaces capture external data, define the necessary format conversions, and direct data to the DELPHI Oracle Financial applications.

Oracle Federal Applications provide standard outbound interfaces, required by the U.S. Treasury, Office of Management and Budget, and General Services Administration.

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## Interface Environment Standards

The following DELPHI software and hardware environment standards are components of the interface process:

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### Software

The application software for inbound and outbound interface data is:

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#### **DELPHI Environment**

- Oracle Financial Applications release 11.0, U.S. Federal release 2.0

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### Hardware Environment

The hardware and operating system software for the DELPHI interface programs includes:

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#### **DELPHI Environment:**

- Application, Database & Web Servers
- UNIX Operating System
- Java Enabled Web Browser
- Oracle 8 RDBMS
- Windows based Web Clients

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### Network/File Transport

The communications environment for the interface effort is:

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#### **File transfer and network systems:**

- DOT IDN
- ADTN 2000

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# Interface File Naming Conventions

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## Inbound System Interfaces

All inbound interfaces to the DELPHI applications are to use existing Open Interface processes within each application. All inbound interface data is formatted to the standards defined in the Oracle Open Interfaces Manual.

All DELPHI interface files have a prescribed naming standard. This naming assists DELPHI user's and developers to identify and track inbound interface files. The interface file naming standard is:

Qualifier 1: Target System Name (DELPHI)

Qualifier 2: Instance(Test, Acct, Prod)

Qualifier 3: File Identifier

- First three characters indicate the originating organization
- Remaining characters describe the data

The example table below will be used to identify and track names of the interface files from external systems:

Table 1: Inbound Interface File Table

External Application	File Name	File Location	Business Object
CUPS	DELPHI.TEST.CUPS	Batch Control File	Payroll
GPO	DELPHI.TEST.GPOTRSMT		WCF Printing Costs
SIBAC	DELPHI.TEST.GSABILL1		SIBAC Billing
GSA	DELPHI.TEST.GSABILL2		Motor Pool Billing

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## Outbound System Interfaces

The outbound interface files also adhere to a prescribed naming standard.

The following outbound naming standards apply:

Qualifier 1: USERID

Qualifier 2: REQUESTID

The table below, will be used to identify and track the names of the outbound interface files to external systems:

Example: Outbound Interface Table

Application	File Name	File Location	Business Object
DELPHI	SYSADMIN.00001		Treasury Payment Data
DELPHI	SYSADMIN.00002		OPAC Billing File

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## External Interface Feeder Program Requirements

As detailed in the DELPHI Interface Strategy document, the Operating Administrations (OA's) will develop their interface feeder programs from their systems to DELPHI. These feeder programs reformat the data from the OA's system to the data requirements of the targeted Oracle Open Interface. The DELPHI Project Team will provide all Oracle Open Interface format information to the OA's. In addition, definitions of the import table data fields will be provided to the OA's.

The OA team responsible for developing the OA interface will provide the DELPHI team with the following information:

- The purpose of the interface
- The source of the interface data
- The proposed frequency of the interface into DELPHI
- Expected transaction volumes

This information is necessary to test the external interface and confirm that DELPHI system resources are available to accommodate the external interface.

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## Interface Testing Standards

The agreed upon interface project deliverables will be tested and approved by the DELPHI and OA representatives who are responsible for the success of the interface project. Two levels of interface program testing have been identified and described in the Build Phase (D.TE.070 - Perform Unit Testing, D.TE-080 - Perform Link Testing). In addition, interfaces will be tested as part of the integration testing activity, also during the Build Phase. The following example table displays the criteria that will be considered while performing interface validation testing:

Application	Business Object	Test Criteria	Tolerance
General Ledger	Payroll	Record Counts	0%
		Hash Totals	1%
		Balances	0%
		Journal Debits and Credits	0%



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## Interface Delivery and Acceptance Standards

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### Delivery

All interface processing output including, statistics, reports, and test validation will be delivered following successful business system testing.

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### Data Acceptance

Interface data acceptance criteria includes the following:

- Must be able to inquire, add, or update the resulting data records which have been interfaced into DELPHI from the external system. For example, if a purchase order is interfaced into DELPHI the respective DELPHI user must be able to inquire, update, or delete the record in the system.
- Must be able to reconcile the financial impact of an external interface with the external interface dollar amounts. For example, if an external interface transaction hash amount equals \$100,000 then a reconciliation should result with a \$100,000 addition to the Oracle Financial tables.